

# EUROPEAN PATENT OFFICE

VA 5685

## Patent Abstracts of Japan

PUBLICATION NUMBER : 63140017  
 PUBLICATION DATE : 11-06-88

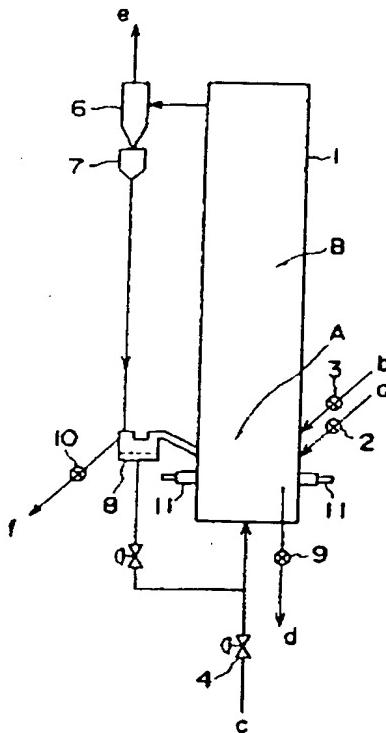
APPLICATION DATE : 29-11-86  
 APPLICATION NUMBER : 61285017

APPLICANT : NIPPON STEEL CORP;

INVENTOR : HIRATA HIROSHI;

INT.CL. : C21B 13/00 C21B 13/14

TITLE : PREREDUCTION OF IRON ORE



**ABSTRACT :** PURPOSE: To prevent formation of angular hard half-reduced ore and to improve the durability of pipings, tuyeres, etc., by providing a high-temp. part within a fluidized bed prerduction furnace and passing ore raw materials through the high-temp. part.

CONSTITUTION: A heating mechanism 11 is provided to the lower part of the fluidized bed prerduction furnace 1 and the locally high-temp. part A is provided thereto. The high-temp. part A is maintained at the temp. higher by about 300–600°C than the temp. in a free board part B which occupies the greater part in the furnace 1. The powdery raw materials of the iron ore and/or half-reduced iron ore are passed in said high-temp. part A. The powdery iron ore is thereby subjected to a high temp. treatment to form the half-reduced ore contg. soft wustite and metal iron. The generation of wear in the piping system for feeding said half-reduced ore to a smelting reduction furnace is, therefore, suppressed and the maintenance of the piping system is facilitated.

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